

12-4-2009

Ex. 277-US-455

Unknown

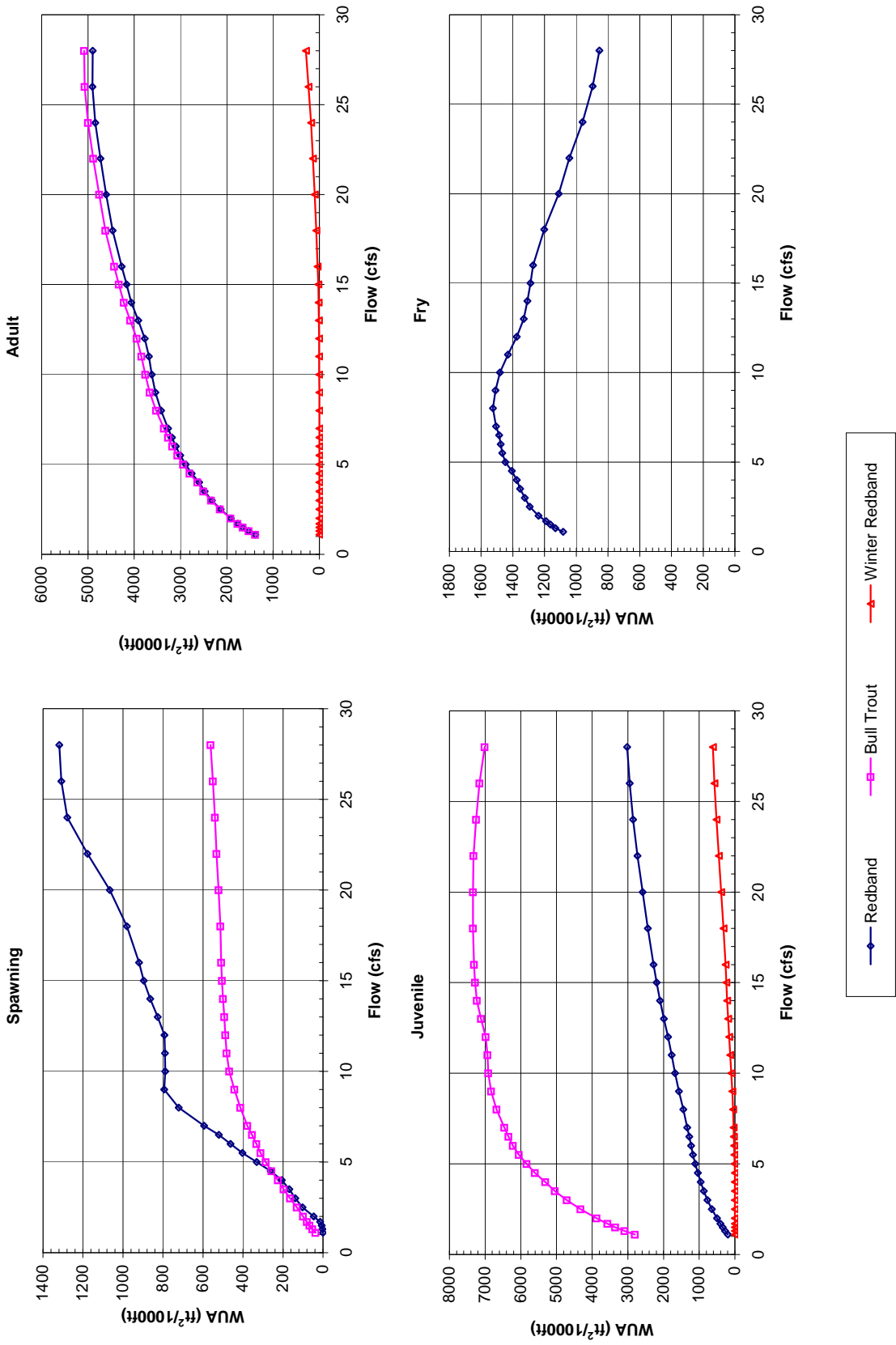
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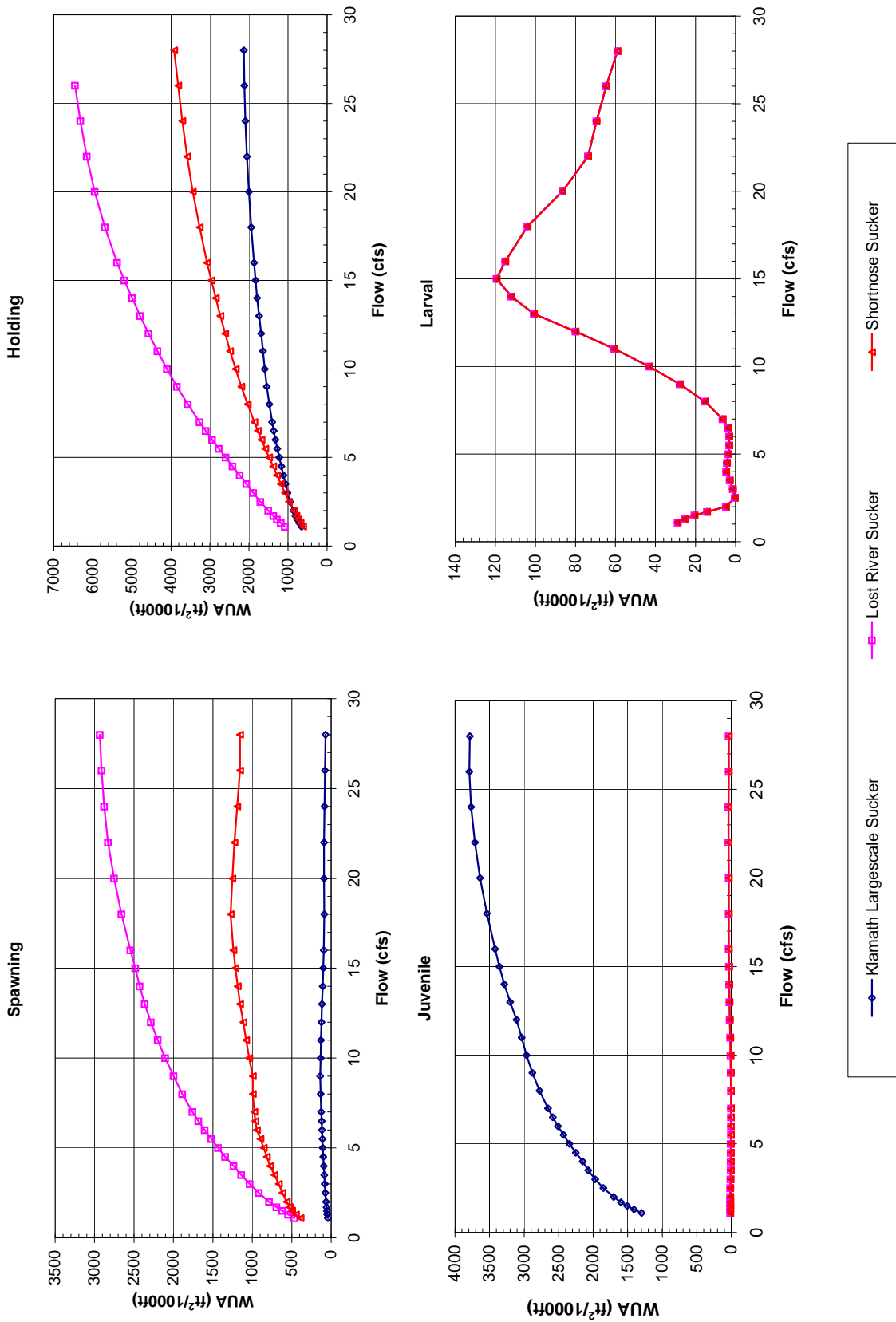
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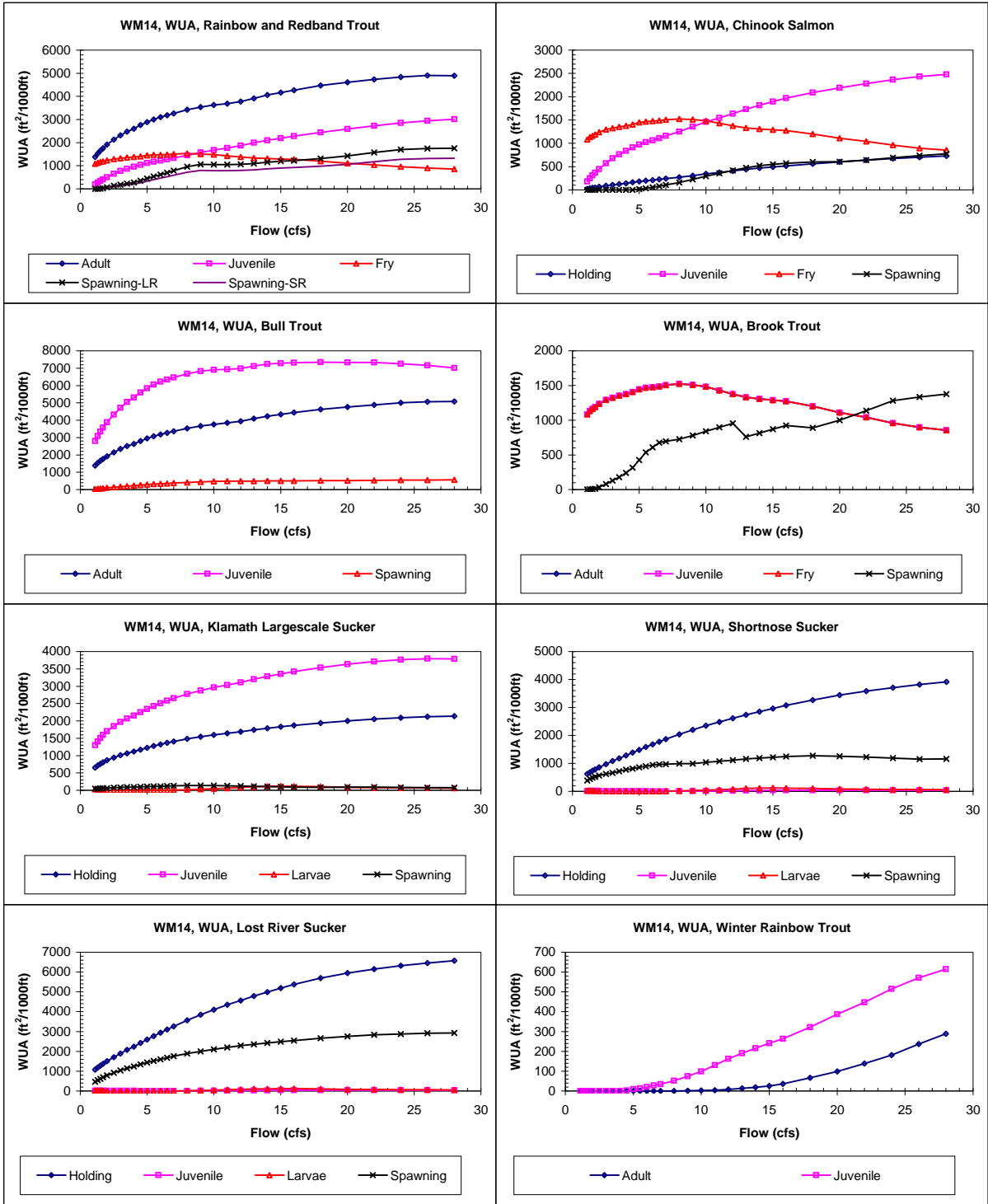
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Site WM 14 Priority Species Habitat - Flow Curves



Site WM 14 Priority Species Habitat - Flow Curves





Claim Reach 637 Williamson River, Site 14, Composite WUA

	WUA (ft ² /1000ft)				
	Q	Adult	Juvenile	Fry	Spawning - Spawning -
	(cfs)				Large River Small River
1.1	1383	197	1084	0	0
1.3	1526	272	1133	3	2
1.5	1655	344	1163	9	7
1.7	1762	409	1191	20	15
2	1912	501	1238	63	47
2.5	2133	645	1294	137	103
3	2321	771	1324	186	139
3.5	2479	870	1354	224	168
4	2597	957	1375	275	206
4.5	2760	1040	1406	349	262
5	2889	1113	1447	442	331
5.5	3004	1173	1467	538	403
6	3101	1225	1477	616	462
6.5	3183	1276	1487	695	521
7	3267	1335	1506	792	594
8	3417	1448	1525	962	721
9	3542	1569	1510	1058	793
10	3623	1680	1482	1052	789
11	3685	1771	1431	1054	791
12	3771	1873	1376	1057	793
13	3915	1991	1331	1100	826
14	4061	2097	1308	1150	864
15	4165	2193	1289	1194	897
16	4270	2280	1272	1224	919
18	4467	2440	1203	1306	981
20	4607	2587	1111	1421	1066
22	4732	2730	1044	1569	1177
24	4841	2854	960	1704	1278
26	4902	2946	896	1745	1309
28	4897	3017	854	1758	1318

	WUA (ft ² /1000ft)				
	Q	Holding	Juvenile	Fry	Spawning
	(cfs)				
1.1	24	183	1084	0	0
1.3	34	251	1133	0	0
1.5	44	314	1163	0	0
1.7	53	370	1191	0	0
2	67	450	1238	0	0
2.5	88	572	1294	0	0
3	108	679	1324	0	0
3.5	126	765	1354	0	0
4	144	839	1375	0	0
4.5	162	909	1406	1	1
5	179	971	1447	19	19
5.5	196	1023	1467	36	36
6	211	1066	1477	54	54
6.5	226	1109	1487	79	79
7	242	1158	1506	105	105
8	274	1252	1525	161	161
9	308	1356	1510	228	228
10	343	1459	1482	294	294
11	376	1545	1431	359	359
12	409	1634	1376	421	421
13	440	1731	1331	473	473
14	467	1820	1308	522	522
15	492	1898	1289	549	549
16	515	1968	1272	571	571
18	558	2087	1203	598	598
20	599	2189	1111	607	607
22	637	2283	1044	642	642
24	672	2368	960	692	692
26	704	2434	896	734	734
28	733	2481	854	776	776

	WUA (ft ² /1000ft)				
	Q	Adult	Juvenile	Fry	Spawning
	(cfs)				
1.1	1386	2805		37	
1.3	1529	3091		53	
1.5	1659	3353		67	
1.7	1768	3571		80	
2	1920	3874		99	
2.5	2147	4325		131	
3	2341	4711		165	
3.5	2507	5045		196	
4	2636	5315		226	
4.5	2805	5604		258	
5	2944	5835		286	
5.5	3069	6051		313	
6	3176	6223		333	
6.5	3269	6344		355	
7	3361	6459		378	
8	3526	6679		414	
9	3664	6831		443	
10	3763	6908		469	
11	3844	6932		481	
12	3943	6980		488	
13	4086	7113		493	
14	4227	7233		499	
15	4330	7279		505	
16	4433	7312		509	
18	4622	7343		513	
20	4755	7337		522	
22	4885	7323		533	
24	5000	7249		540	
26	5071	7156		551	
28	5081	7014		562	

	WUA (ft ² /1000ft)				
	Q	Adult	Juvenile	Fry	Spawning
	(cfs)				
1.1	1084	1084	1084	1	1
1.3	1133	1133	1133	3	3
1.5	1163	1163	1163	6	6
1.7	1191	1191	1191	11	11
2	1238	1238	1238	36	36
2.5	1294	1294	1294	81	81
3	1324	1324	1324	129	129
3.5	1354	1354	1354	177	177
4	1375	1375	1375	240	240
4.5	1406	1406	1406	317	317
5	1447	1447	1447	425	425
5.5	1467	1467	1467	535	535
6	1477	1477	1477	610	610
6.5	1487	1487	1487	677	677
7	1506	1506	1506	697	697
8	1525	1525	1525	726	726
9	1510	1510	1510	780	780
10	1482	1482	1482	839	839
11	1431	1431	1431	897	897
12	1376	1376	1376	955	955
13	1331	1331	1331	762	762
14	1308	1308	1308	815	815
15	1289	1289	1289	871	871
16	1272	1272	1272	924	924
18	1203	1203	1203	888	888
20	1111	1111	1111	1001	1001
22	1044	1044	1044	1138	1138
24	960	960	960	1280	1280
26	896	896	896	1333	1333
28	854	854	854	1377	1377

Claim Reach 637 Williamson River, Site 14, Composite WUA

	WUA (ft ² /1000ft)				
	Q				
	(cfs)	Holding	Juvenile	Larvae	Spawning
Klamath Largescale Sucker	1.1	655	1299	29	43
	1.3	712	1410	26	49
	1.5	762	1508	20	54
	1.7	808	1596	14	58
	2	866	1705	5	64
	2.5	946	1851	0	73
	3	1012	1971	1	81
	3.5	1068	2068	3	88
	4	1117	2152	5	95
	4.5	1174	2253	4	101
	5	1226	2343	4	106
	5.5	1275	2427	3	112
	6	1322	2509	3	117
	6.5	1367	2585	4	121
	7	1407	2655	7	126
	8	1480	2776	15	134
	9	1542	2878	28	138
	10	1597	2966	43	134
	11	1642	3035	61	129
	12	1689	3108	80	122
	13	1742	3203	101	116
	14	1791	3286	112	108
	15	1832	3357	119	100
	16	1871	3421	115	92
	18	1942	3536	104	87
	20	2003	3636	86	90
	22	2051	3710	74	90
	24	2091	3766	70	84
	26	2118	3792	65	79
	28	2134	3785	59	72

	WUA (ft ² /1000ft)				
	Q				
	(cfs)	Holding	Juvenile	Larvae	Spawning
Shorthead Sucker	1.1	618	14	29	388
	1.3	677	14	26	447
	1.5	733	15	20	495
	1.7	785	15	14	523
	2	860	14	5	562
	2.5	975	13	0	618
	3	1081	11	1	663
	3.5	1183	9	3	719
	4	1280	7	5	774
	4.5	1383	7	4	815
	5	1485	6	4	854
	5.5	1584	5	3	896
	6	1681	4	3	943
	6.5	1775	4	4	960
	7	1865	3	7	975
	8	2037	5	15	992
	9	2197	8	28	994
	10	2345	12	43	1039
	11	2483	16	61	1080
	12	2612	21	80	1114
	13	2735	26	101	1156
	14	2853	30	112	1186
	15	2967	34	119	1214
	16	3072	35	115	1241
	18	3266	37	104	1275
	20	3442	39	86	1254
	22	3583	39	74	1227
	24	3708	39	70	1193
	26	3817	38	65	1155
	28	3918	37	59	1157

	WUA (ft ² /1000ft)				
	Q				
	(cfs)	Holding	Juvenile	Larvae	Spawning
Lost River Sucker	1.1	1081	14	29	467
	1.3	1185	14	26	543
	1.5	1283	15	20	618
	1.7	1375	15	14	691
	2	1505	14	5	787
	2.5	1705	13	0	917
	3	1892	11	1	1032
	3.5	2069	9	3	1138
	4	2239	7	5	1238
	4.5	2420	7	4	1343
	5	2599	6	4	1434
	5.5	2773	5	3	1519
	6	2942	4	3	1603
	6.5	3106	4	4	1683
	7	3264	3	7	1758
	8	3564	5	15	1887
	9	3845	8	28	1997
	10	4103	12	43	2105
	11	4345	16	61	2199
	12	4570	21	80	2287
	13	4786	26	101	2362
	14	4993	30	112	2427
	15	5192	34	119	2484
	16	5376	35	115	2544
	18	5691	37	104	2658
	20	5953	39	86	2752
	22	6154	39	74	2829
	24	6323	39	70	2877
	26	6460	38	65	2910
	28	6568	37	59	2934

	WUA (ft ² /1000ft)				
	Q				
	(cfs)	Adult	Juvenile	Fry	Spawning
Winter Rainbow Trout	1.1	0	0		
	1.3	0	0		
	1.5	0	0		
	1.7	0	0		
	2	0	0		
	2.5	0	0		
	3	0	0		
	3.5	0	0		
	4	0	0		
	4.5	0	3		
	5	0	9		
	5.5	0	14		
	6	0	20		
	6.5	0	27		
	7	0	35		
	8	0	52		
	9	2	74		
	10	3	99		
	11	4	130		
	12	8	162		
	13	13	190		
	14	19	216		
	15	25	241		
	16	36	263		
	18	66	322		
	20	99	387		
	22	139	447		
	24	181	515		
	26	237	570		
	28	289	614		